Practice: 528 - Prescribed Grazing

Scenario: #1 - Medium Intensity 3-7 Day Rotation Frequency

## **Scenario Description:**

Design and implementation of a grazing system that will enhance pasture condition and ecosystem function as well as optimize efficiency and economic return through monitoring (ex:photo points, stubble height after grazing, etc) & record keeping. Livestock graze each pasture from three (3) to seven (7) days in rotation. Rotation is based on monitoring livestock demand and supply.

## **Before Situation:**

Current grazing system exhibits undesirable and inefficient use of forage plants and such use has a negative impact on pasture condition, as well as soil and water resources. Inefficient use results in overgrazing, spot grazing, livestock trailing, concentration areas, uncontrolled access to streams and ponds, ephemeral erosion, gully erosion, streambank erosion. Stocking rates are higher than the current level of production and efficiency of use can support without management changes. There is currently no monitoring plan in place to evaluate change on the landscape.

### **After Situation:**

Typical scenario based on a grazing system consisting of a 30 animal unit cow/calf operation (including bull(s), calves and replacement females) on 80 acres. Scenario results in an increase (above the low intensity option) in labor required to complete the following activities: farm labor to mow or clip pastures; monitor and measure forage growth; complete record keeping; analyze plant growth and animal performance; and make decisions or other management techniques. Management techniques reduce the use of supplemental feed, control weeds, and reduce energy requirements. Prescribed grazing system is designed to protect the health and vigor of the plant communities that are in place. Livestock are managed in a way that enhances pasture condition and function through protection of sensitive areas and efficient harvest of forage resources. Runoff, sediment and nutrient loss are reduced by improving plant density, diversity and percent cover. Grazing system success is evaluated through short term monitoring and maintaining grazing stop height requirements. Acquisition of technical knowledge needed to effectively implement prescribed grazing. Costs and activities are typical for conventional and organic producers. Associated Practices: (511) Forage Harvest Management, (512) Forage and Biomass Planting, (590) Nutrient Management, (595) Integrated Pest Management, (561) Heavy Use Area Protection, (382) Fence, (614) Watering Facility, (378) Pond, (642) Water Well, (314) Brush Management, (315) Herbaceous Weed Control, (338) Prescribed Burning.

# **Scenario Feature Measure:**

Scenario Unit: Acre

Scenario Typical Size: 80

Scenario Cost: \$2,777.39 Scenario Cost/Unit: \$34.72

Cost Details (by category):

Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
	297	7			200	
Acquisition of Technical Kn	owledge					
Training, Workshops	294	Educational seminar or series of meetings emphasizing	Each	\$41.42	1	\$41.42
		interaction and exchange of information among a usually				
		small number of participants.				
Equipment/Installation						
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	\$27.72	20	\$554.40
Rangeland/grassland field monitoring kit	967	Miscellaneous tools needed to complete rangeland/grassland monitoring. Materials may include	Each	\$43.67	1	\$43.67
		camera, clippers, plot frame, scale, tape measure, etc. Includes materials and shipping only.				
Labor						
Skilled Labor	230	Labor requiring a high level skill set: Includes carpenters, welders, electricians, conservation professionals involved	Hour	\$24.49	30	\$734.70
		with data collection, monitoring, and or record keeping, etc				
General Labor	231	Labor performed using basic tools such as power tool,	Hour	\$17.54	80	\$1,403.20
		shovels, and other tools that do not require extensive				
		training. Ex. pipe layer, herder, concrete placement,				
		materials spreader, flagger, etc.				

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Practice: 528 - Prescribed Grazing

Scenario: #2 - High Intensity <3 Day Rotation Frequency

## **Scenario Description:**

Design and implementation of a grazing system that will enhance pasture condition and ecosystem function as well as optimize efficiency and economic return through monitoring (ex:photo points, stubble height after grazing, etc) & record keeping. Livestock graze each pature/paddock from no more than three (3) days in rotation. Rotation is based on monitoring livestock demand and supply.

# **Before Situation:**

Current grazing system exhibits undesirable and inefficient use of forage plants and such use has a negative impact on pasture condition, as well as soil and water resources. Inefficient use results in overgrazing, spot grazing, livestock trailing, concentration areas, uncontrolled access to streams and ponds, ephemeral erosion, gully erosion, streambank erosion. Stocking rates are higher than the current level of production and efficiency of use can support without management changes. There is currently no monitoring plan in place to evaluate change on the landscape.

### **After Situation:**

Typical scenario based on a grazing system consisting of a 30 animal unit cow/calf operation (including bull(s), calves and replacement females) on 60 acres. Scenario results in an increase (above the medium intensity option) in labor required to complete the following activities: farm labor to mow or clip pastures; monitor stop grazing heights and measure forage growth; complete record keeping; analyze plant growth and animal performance; and make decisions or other management techniques. Management techniques reduce the use of supplemental feed, control weeds, and reduce energy requirements. Prescribed grazing system is designed to protect the health and vigor of the plant communities that are in place. Livestock are managed in a way that enhances pasture condition and function through protection of sensitive areas and efficient harvest of forage resources. Runoff, sediment and nutrient loss are reduced by improving plant density, diversity and percent cover. Grazing system success is evaluated through short term monitoring and maintaining grazing stop height requirements. Acquisition of technical knowledge needed to effectively implement prescribed grazing. Costs and activities are typical for conventional and organic producers. Associated Practices: (511) Forage Harvest Management, (512) Forage and Biomass Planting, (590) Nutrient Management, (595) Integrated Pest Management, (561) Heavy Use Area Protection, (382) Fence, (614) Watering Facility, (378) Pond, (642) Water Well, (314) Brush Management, (315) Herbaceous Weed Control, (338) Prescribed Burning.

# **Scenario Feature Measure:**

Scenario Unit: Acre

**Scenario Typical Size:** 60

Scenario Cost: \$3,906.36 Scenario Cost/Unit: \$65.11

Cost Details (by category):

0000 2 010 (27 00.080.77				Price		
Component Name	ID	Component Description	Unit	(\$/unit)	Quantity	Cost
	207	ı			200	1
	297				200	
	295				1	
Acquisition of Technical Kno	wledge					
Training, Workshops	294	Educational seminar or series of meetings emphasizing interaction and exchange of information among a usually small number of participants.	Each	\$41.42	1	\$41.42
Training, Registration Costs	296	Conference Registration Fees	Each	\$133.62	1	\$133.62
Equipment/Installation						
Rangeland/grassland field monitoring kit	967	Miscellaneous tools needed to complete rangeland/grassland monitoring. Materials may include camera, clippers, plot frame, scale, tape measure, etc. Includes materials and shipping only.	Each	\$43.67	1	\$43.67
All terrain vehicles, ATV	965	Includes equipment, power unit and labor costs.	Hour	\$27.72	30	\$831.60
Labor						
General Labor	231	Labor performed using basic tools such as power tool, shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.	Hour	\$17.54	100	\$1,754.00

Drice

# Labor

Skilled Labor	230 Labor requiring a high level skill set: Includes carpenters,	Hour	\$24.49	45	\$1,102.05
	welders, electricians, conservation professionals involved				
	with data collection, monitoring, and or record keeping,	etc.			

Practice: 528 - Prescribed Grazing

Scenario: #3 - Pasture Deferment - Long Term

## **Scenario Description:**

Defer the pasture for 210 days and up to a growing season to provide rest to specific plants such as native grasses. The rest is needed to provide long-term rest to specific plants that would typically decline in plant health, vigor, and availability due to overgrazing. The importance of long-term deferment is critical to the long term success of the plants and meeting the desired life span.

### **Before Situation:**

The producer will typically graze the plants before they have sufficient time to become established. Therefore, any plants that emerges will be susceptible to early grazing pressure and possibly overgrazing. Existing herbacesous vegetation will compete against the desired plants and become dominant. The lack of cover reduces the wildlife habitat. No monitoring or record keeping is currently being completed. Plants not adapted or suited, inadequate wildlife cover, soil erosion, and inadequate plant productivity and vigor are common resource concerns.

### **After Situation:**

Scenario describes activities completed to restrict grazing for a defined period during the normal grazing period to provide rest to targeted plants. Activities include moving livestock to alternate locations, sampling and analyzing pasture condition, recordkeeping. Forgone Income used represents the acreage of usable forage not utilized during the deferment period as a proportion of the grazing season. Typical size of 120 acre pasture operation with 30 animal units where 50% of the acreage (or 60 acres) is deferred from grazing for 210 days. Costs and activities are typical for conventional and organic producers. Associated Practices: (511) Forage Harvest Management, (512) Forage and Biomass Planting, (590) Nutrient Management, (595) Integrated Pest Management, (561) Heavy Use Area Protection, (382) Fence, (614) Watering Facility, (378) Pond, (642) Water Well, (314) Brush Management, (315) Herbaceous Weed Control, (338) Prescribed Burning.

## **Scenario Feature Measure:**

Scenario Unit: Acre

Scenario Typical Size: 60

Scenario Cost: \$4,301.45 Scenario Cost/Unit: \$71.69

Cost Details (by category): Price **Component Name Component Description** Unit **Quantity Cost** (\$/unit) Equipment/Installation Rangeland/grassland field 967 Miscellaneous tools needed to complete Each \$43.67 1 \$43.67 monitoring kit rangeland/grassland monitoring. Materials may include camera, clippers, plot frame, scale, tape measure, etc. Includes materials and shipping only. Truck, Pickup 939 Equipment and power unit costs. Labor not included. \$33.55 \$268.40 Hour 50 961 Livestock transportation costs to implement a grazing Mile \$2.12 \$106.00 Trucking, moving livestock to new paddock rotation using a gooseneck trailer 6'8" x 24'. Includes equipment, power unit and labor costs. Foregone Income FI, Grazing AUMs 2079 Grazing is the Primary Land Use AUM \$15.29 210 \$3,210.90 Labor Skilled Labor 230 Labor requiring a high level skill set: Includes carpenters, Hour \$24.49 16 \$391.84 welders, electricians, conservation professionals involved with data collection, monitoring, and or record keeping, etc. \$280.64 General Labor 231 Labor performed using basic tools such as power tool, Hour \$17.54 16 shovels, and other tools that do not require extensive training. Ex. pipe layer, herder, concrete placement, materials spreader, flagger, etc.